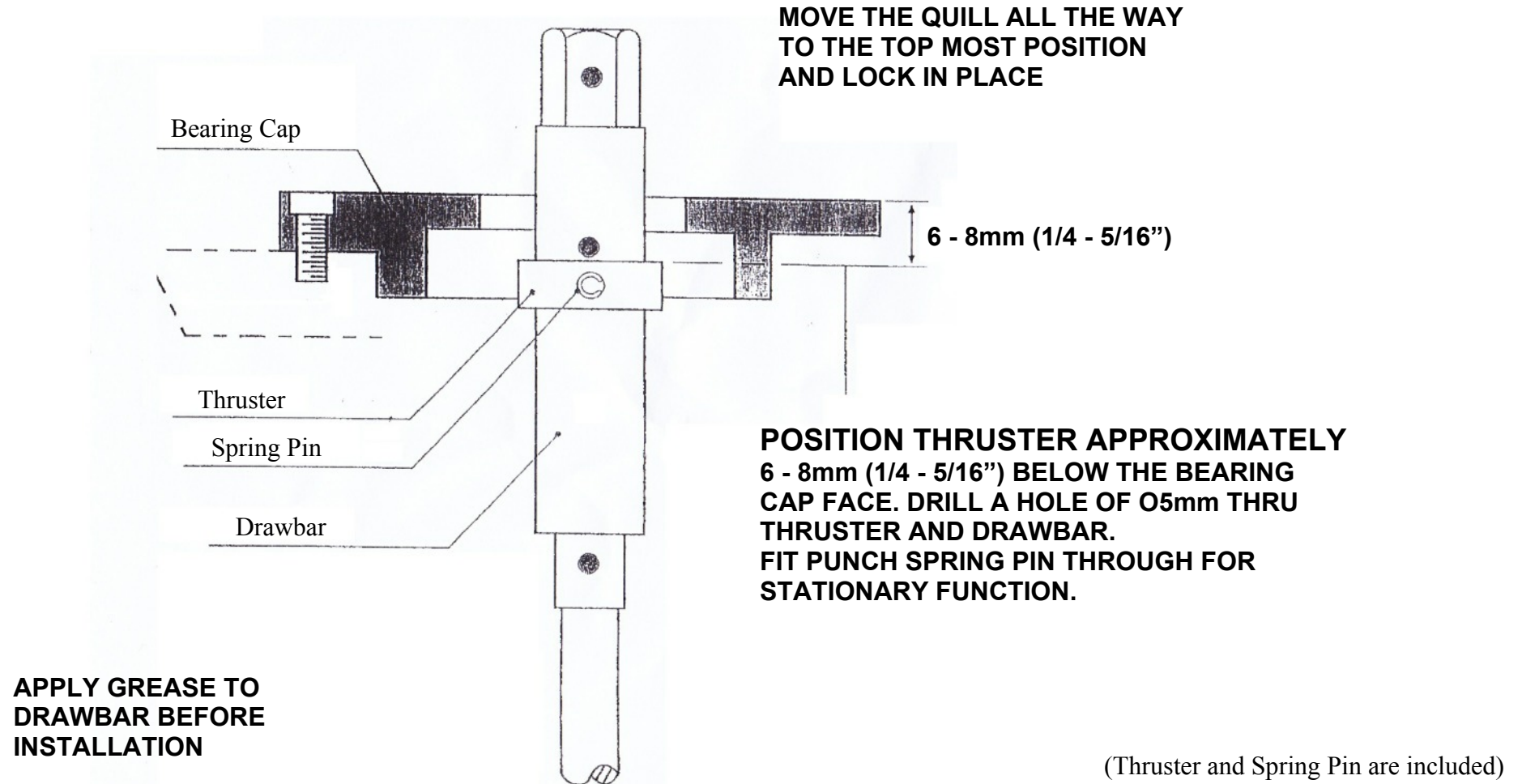




# POWER DRAWBAR SYSTEM FOR EASY TOOL CHANGE



**EMS (International) Limited**

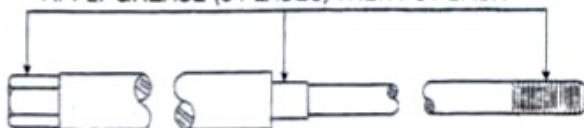
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## INSTALLATION GUIDE

### 1. TAKE THE EXISTING DRAWBAR OUT, AND

APPLY GREASE (3 PLACES) THEN PUT BACK



### 2. INSTALL THE AIR POWER DRAWBAR UNIT. ALIGN THE AIR POWER DRAWBAR FLANGE TO EXISTING VARIABLE SPEED CAP BY USING 3 BOLTS. SEE PROPER-ADJUSTMENT BEFORE TIGHTEN THE 3 SCREWS.

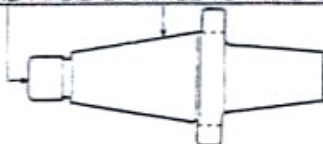
### 3. REMOVE 2 EXISTING BOLTS FROM THE BOTTOM OF THE MILL FEED SELECTION SHIFTER, USING 2 BOLTS (ø5mm/m x 25mm/m INCLUDED) TO MOUNT VALVE BRACKET ON MILL FEED SELECTION SHIFTER.

### 4. CONNECT AIR NIPPLE TO THE BACK OF AIR FILTER.

### 5. CONNECT COMPRESSED AIR TUBE ( 2 TUBES SUPPLIED #1 & #2) FROM CONTROL VALVE TO THE POWER DRAWBAR.

**BE CAREFUL: DO NOT LET THE AIR TUBING BENDING SHARPLY.**

- AIR PRESSURE MUST BE 90 P.S.I. DURING A CYCLE.
- SET AIR PRESSURE OVER 90 P.S.I. (6.5kg/cm<sup>2</sup>) AT LEAST FOR THE AIR FILTER.
- SET OIL LUBRICATOR FEED TO 2 FOR ITS BEST PERFORMANCE.
- KEEP COLLETS FREE OF CHIPS AND GREASED FOR EASY IMPACT DOWN, AND AVOID DAMAGE TO THREADS.



## USE & CARE GUIDE

### REMEMBER

- IF THE AIR PRESSURE DROP BELOW 35 P.S.I. WHEN UNIT IS OPERATING, IT WILL BE DISABLE THE NORMAL WORKING.
- IF YOUR MILL IS NOT EQUIPPED WITH A BRAKE, USE SAFETY SOMETHING TO HOLD THE TOOL WHEN CHANGE TOOLS, THIS WILL PREVENT THE RISK OF INJURY.

### OPERATING

- STOP SPINDLE COMPLETELY WHEN CHANGING TOOLS.
- QUILL/SPINDLE MUST BE RETURNED AND LOCKED TO THE TOP POSITION WHEN USING THE AIR DRAWBAR TO CHANGE TOOLS.
- LIFT VALVE KNOB UP TO LOCK IN TOOL UNTIL HELD SECURELY.
- PUSH VALVE KNOB DOWN TO RELEASE TOOL.

**WARNING** TO REDUCE RISK OF INJURY

- THE COVER SHOULD BE COVERED THE UNIT WHILE OPERATION.
- MAKE SURE THAT THREADS ON DRAWBAR OR COLLETS HAVE SUFFICIENT THREAD LENGTH THAT DRAWBAR ROD THREADS WILL NOT BOTTOM OUT BEFORE SECURING TOOL COMPLETELY IN SPINDLE.
- PERIODICALLY CONFIRM THE THREADS OF COLLETS AND DRAWBAR ARE SECURELY.
- DO NOT FILL OIL WHEN AIR LUBRICATOR PRESSURIZED.
- ABSOLUTELY NOT IN USE ANY GUMMY MACHINE OIL OR ANY SYNTHETIC OIL — TEND TO DEGENERATE RAPIDLY, LOWERS THE EFFICIENCY OF THE AIR MOTOR.
- USABLE OIL: PROFESSIONAL AIR TOOL OIL ONLY.

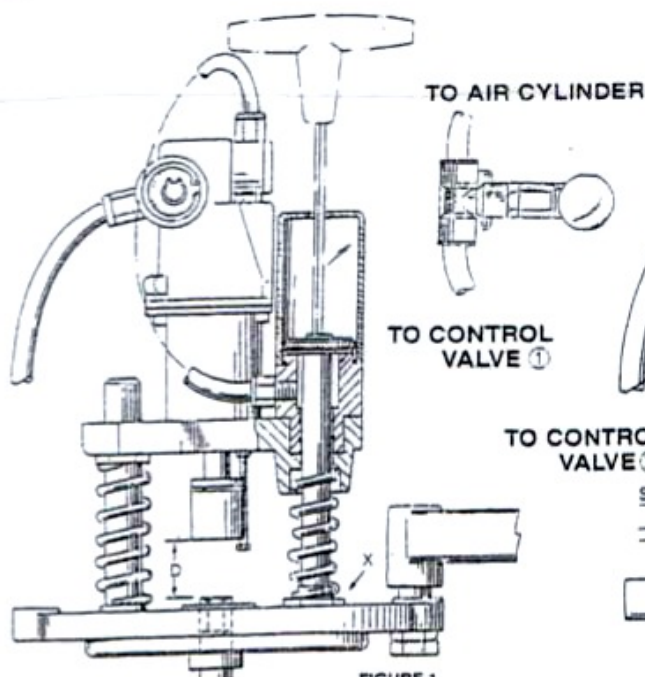
### STOP

- DO NOT OPERATE IF THE UNIT FAILED.

## PROPER ADJUSTMENT

### STEP 1:

1. BRING THE QUILL ALL THE WAY UP AND LOCK IT IN THAT POSITION.
2. LOSSEN THE "X" NUT THEN INSERT THE 4mm T WRENCH INTO THE AIR CYLINDER (SEE FIG 1). ADJUST THE DISTANCE "D" BETWEEN THE SOCKET AND THE DRAWBAR HEX TO ABOUT 0.25"-0.4" (6-10mm/m) THEN SHOULD TIGHT THE "X" NUT.



### STEP 2:

1. AFTER THE PREVIOUS PROCEDURE, PUSH THE AIR MOTO DOWN BY HAND AND RELEASE, MAKE SURE THE DRAWBAR HEX IS VERY EASILY TO INSERT IN THE SOCKET THEN SET SCREWS WITH CAP.
2. ADJUST THE SCREW "Y" TO CONTACT THE STOP PATE (FUNCTION AS TO STOP), DO NOT LET THE DRAWBAR HEX ENGAGE ALL THE WAY TO THE TOP OF SOCKET, TH "S" (SEE FIG 2) SHOULD HAVE A 0.1" (2-3mm/m) SPACER.

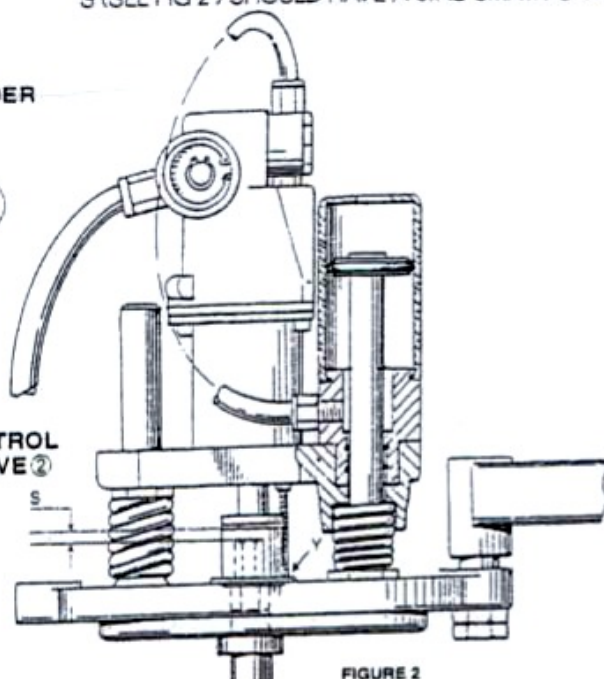


FIGURE 2